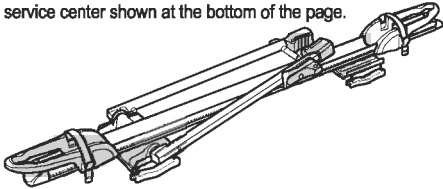


# inno. INA382 UPRIGHT LOCK Instruction Manual

ADVANCED CAR RACKS

Thank you for purchasing this INNO product.

- Please read through this manual thoroughly before use, and make sure that you follow all of the instructions carefully.
- After reading this instruction manual, store it in a safe place for future reference.
- If you have any questions regarding this product, please contact the service center shown at the bottom of the page.



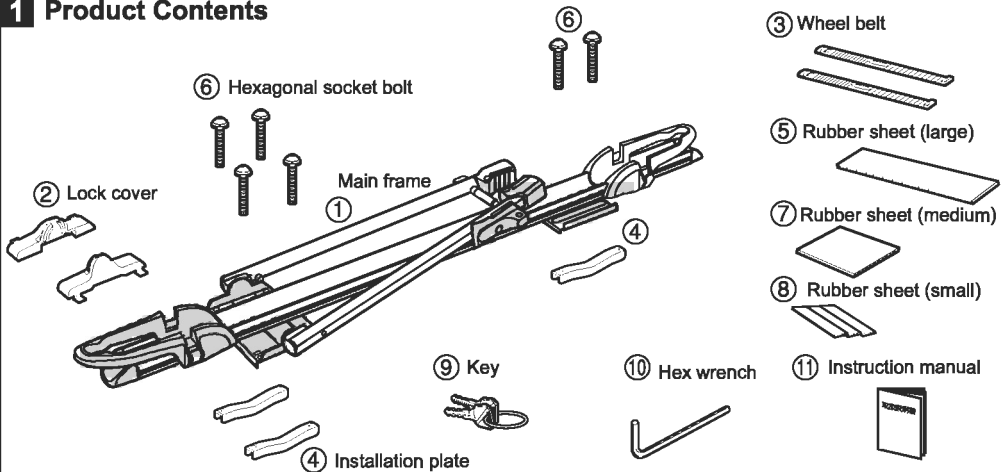
**Warning** Parts or loaded items falling from the lock, or catching passers by or other cars in the lock can cause serious accidents that may lead to serious injury or death.

- Check that the base carrier which is used to install the lock has the strength to support the bicycle weight, and that it is mounted securely.
- Adjust the front and rear spaces of the base carrier to between 50~85cm.
- Before driving, make sure that the bolts, belts, and other such parts are lightly fastened.
- Do not attempt to change or alter this product in any way.
- Do not attach anything other than bicycles to this lock. Do not attach more than 2 bicycles to this lock.
- Always lock with the key when driving.

**Caution** There is a risk of injury, or damage to the lock, vehicle, or bicycle.

- This product is not designed as a theft-prevention device. Do not leave your bicycles in the lock for long periods of time.

## 1 Product Contents



No.	Part	Qty	No.	Part	Qty
①	Main frame	1	⑧	Rubber sheet (small)	3
②	Lock cover	2	⑨	Key	2
③	Wheel belt	2	⑩	Hex wrench	1
④	Installation plate	3	⑪	Instruction manual	1
⑤	Rubber sheet (large)	1			
⑥	Hexagonal socket bolt	6			
⑦	Rubber sheet (medium)	1			

## Contact Information

If you have any complaints, requests or comments, please contact us at the service center listed below. Car Mate USA shall not be held liable for any accidents or incidental losses arising from improper installation or use, nor for those arising from installation or use after the customer has made any modifications to the system's original configuration or specifications.



Car Mate USA 383 Van Ness Ave., Suite 1603 Torrance, CA  
 310.533.9881  
[www.innoracks.com](http://www.innoracks.com) [support@rv-inno.com](mailto:support@rv-inno.com)

# Checks Before Use

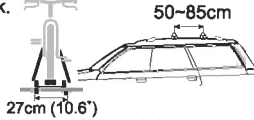
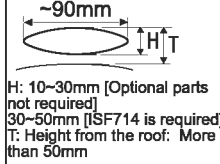
## Checks Before Use (Base Carrier)

This lock can mount square and round bars, and most types of original crossbar (\*1). When installing this lock to a commercially available base carrier, follow the instructions in the instruction manual to securely install the lock.

### Warning

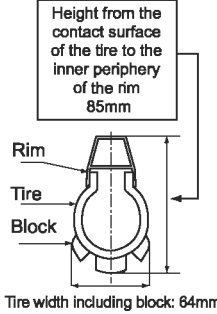
- When installing the base carrier which is used to install this lock, check the instruction manual of either the base carrier or the vehicle to ensure that the carrier has enough strength to support the bicycles. If for any reason the base carrier does not have enough strength to support the bicycles, do not install it.
- The front and rear spaces of the base carrier are between 50~85cm. If you are able to adjust the front and rear spaces, adjust them as wide as possible to make the lock more stable.
- This lock requires a width of 27cm for installation. However, if more than one lock is used, the bicycles may interfere with each other, depending on their size.
- Do not straddle the base carrier after installation.

### Suitable Crossbar Size



## Compatible Tire Sizes

Mountain Bike/Road Racer Type	20-28 Inch
Junior Type	16-20 Inch
Others	Refer to the diagram on the right.



## Down Tube Compatibility

- Bicycles with a down tube external diameter between 22~85mm
- No excessively curved down tubes.

### Warning

- If the external diameter of the down tube is not compatible, the holder will not be able to fix the bicycle securely, which may cause the bicycle to fall out of the lock.
- If the down tube is excessively curved, the down tube and arm will not form a right angle, which will result in the holder not being able to fix the bicycle securely, causing the bicycle to fall out of the lock.

# Preparations Before Installation

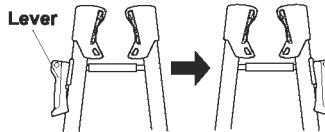
## 1 Preparations before installation (Setting the lever direction)

### Notes

Sometimes you do not need to change the factory settings.

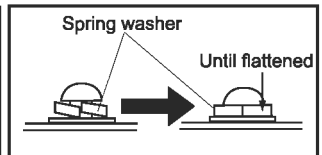
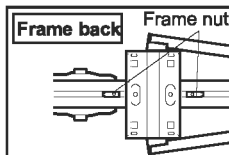
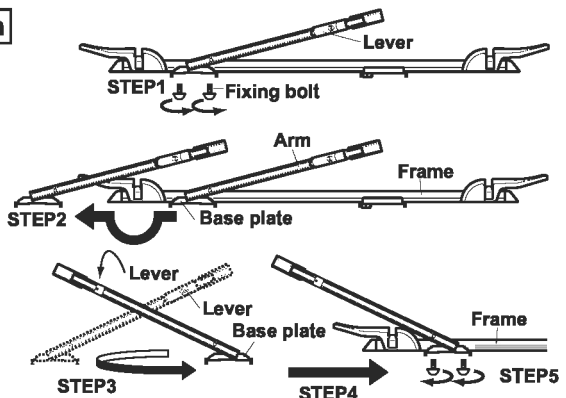
You may need to change the factory settings depending on which direction the bicycle is facing when attached.

As the lever must be operated from outside of the vehicle, changes are necessary depending on which direction the bicycle is facing when attached.



## How to Change the Lever Direction

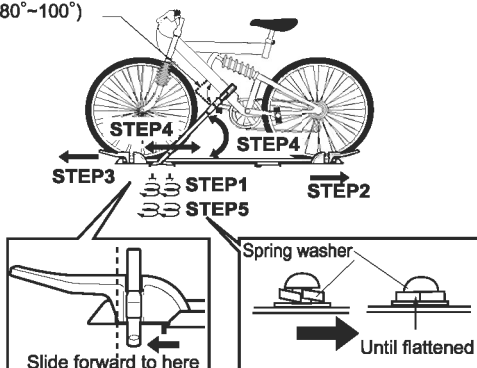
- 1 Remove the base plate fixing bolts (2 bolts) from the back of the main frame. (STEP 1)
- 2 Remove the base plate and arm from the frame. (STEP 2)
- 3 Rotate the base plate to change the direction of the lever. (STEP 3)
- 4 Insert the base plate into the frame. (STEP 4)
- 5 Use the frame nut on the back of the frame to trap the base plate, and tighten the fixing bolts (2 bolts). (STEP 5)



# Preparations Before Installation

## 2 Preparations Before Installation (Adjusting the Arm Position) **Notes** Do not place anything on the roof of the vehicle while working.

Adjust to a right-angle  
(80°~100°)



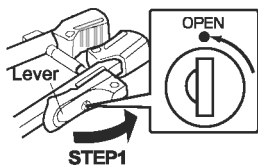
- 1 Loosen the base plate fixing bolts 2 full turns (STEP 1), and slide the rear tire stopper to the rearmost section. (STEP 2)
- 2 Slide the front tire stopper and base plate to the front side of the bicycle. (STEP 3)
- 3 Place the tire on the front tire stopper, and slide the base plate towards the rear until the arm and down tube form a right-angle. (STEP 4)  
※ See below for details on tightening the lever (adjusting the tightness of the lever)
- 4 Take down the bicycle, and fix the base plate in place. (STEP 5)

### **Notes**

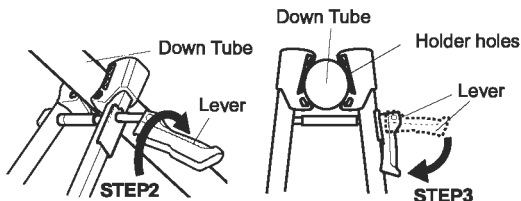
The angle may not be a perfect right angle because of the size or shape of the bicycle. However, bicycles can be attached if this angle is within the range of 80°~100°.

## 3 Preparations Before Installation (Adjusting the Lever Tightness)

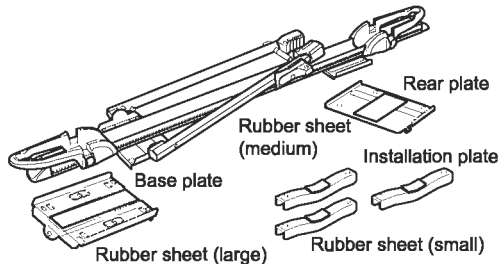
- 1 Release (OPEN) the key and pull the lever out. (STEP 1)



- 2 Place the bicycle on the lock, trap the down tube, and rotate the lever to adjust it so that approximately half of the holder holes are flattened when the lever is folded back down. (STEP 2, STEP 3)



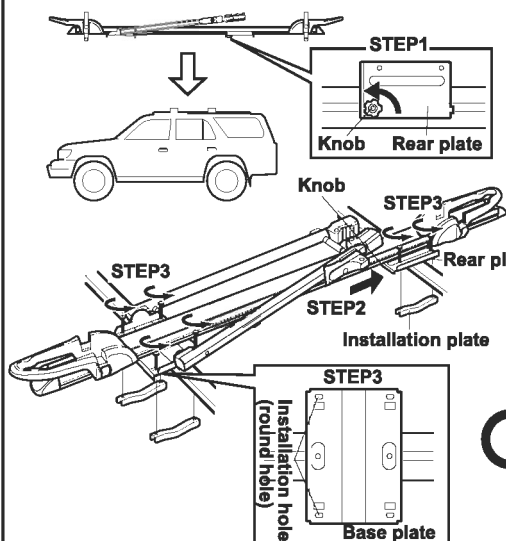
## 4 Preparations Before Installation (Installing to a Crossbar)



When installing to original crossbars, stick the included rubber sheet to the places on the base plate, rear plate, and attachment plate that touch the crossbars.

# Installation Procedure

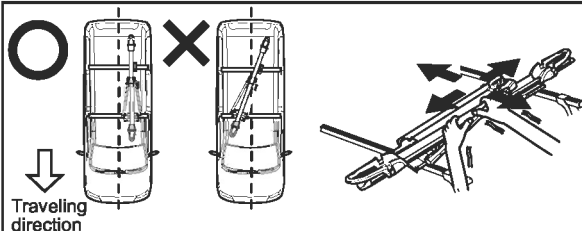
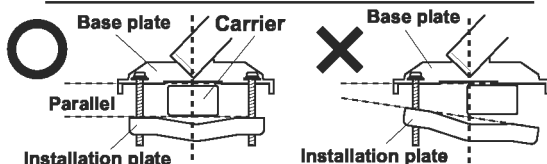
## 1 Installing the Main Frame (Fixing)



- 1 Loosen the knob on the rear plate, and place the base plate on the base carrier. (STEP 1)
- 2 Slide the rear plate to the base carrier position, and fix the knob. (STEP 2)
- 3 Pass the hexagonal socket bolts through the installation holes (round holes) on the outer sides of the rear plate and base plate, and tighten each of the 2 bolts (total of 6 bolts) equally so that the installation plate is parallel with the plate. (STEP 3)

### ⚠ Caution

Do not pass the hexagonal socket bolts through the square holes. Make sure that the installation plate does not hit/touch the roof.

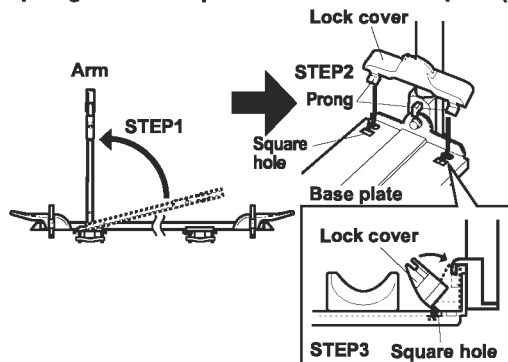


### [Installation Check]

- Check that the lock is installed parallel to the traveling direction of the vehicle.
- Check that the whole unit does not move backwards and forwards or left and right, and that the knob and bolts are all tightened securely. If you find one of them is loosen, tighten it further.
- Check that the center of each plate is aligned with the center of the base carrier.

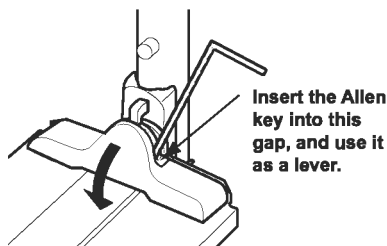
## 2 Installing the Lock Cover ⚠ Caution Support the arm section so that your fingers do not get trapped while working.

After checking the installation, stand the arm so it is vertical (STEP 1), insert the rocker cover prongs into the square holes on the base plate (STEP 2), and attach the lock cover. (STEP 3)



### Removing the Lock Cover

\* When removing the cover, if you find that the cover is difficult to remove, insert the provided Allen key to use as a lever.

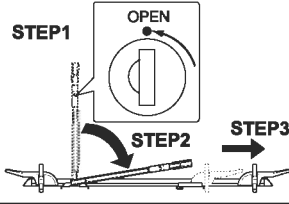


# Attaching a Bicycle

## 1 Attaching a Bicycle

**Caution** Always put the bicycle on, and take the bicycle off the lock when the vehicle is on a flat surface.

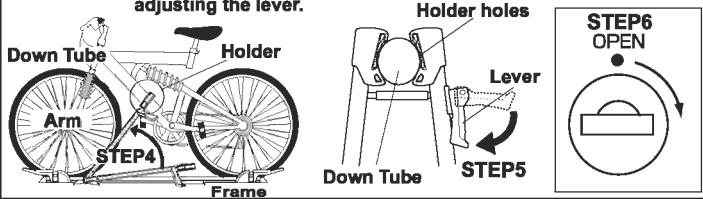
1 Release the lever lock (OPEN), pull the lever out (STEP 1), and lower the arm. (STEP 2) Lower the rear tire stopper to the back. (STEP 3)



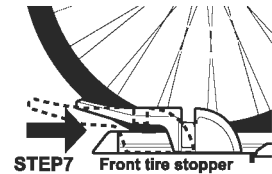
2 Place the bicycle tire on the frame, raise the arm, trap the down tube with the holder (STEP 4), push the lever down (STEP 5), and lock using the key. (STEP 6)

**Notes**

If the pedal or front gear touch the arm, adjust so that the upper part of the down tube is trapped. See page 4 for details on adjusting the lever.

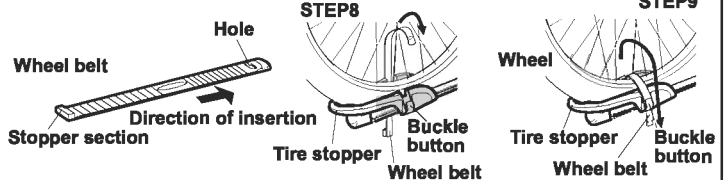


3 Trap the tires with the front and rear tire stoppers. (STEP 7)



4 Press and hold the buckle button on the rear side of the tire stopper, and pass through from the side that has the wheel belt hole. (STEP 8)

5 Pass the wheel belt between the spokes, through the front buckle, and then fix securely in place. (STEP 9)

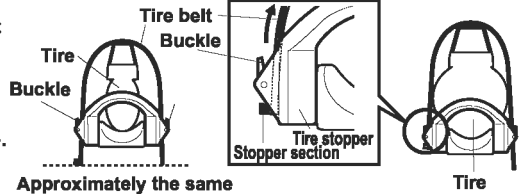


**Notes**

If one side of the wheel belt is too long, it will interfere with the roof while driving. Therefore, adjust the length of the wheel belt to the suitable length. If the tires are thin, adjust the belt so that the remaining parts are approximately the same. If the tires are thick, pull the wheel belt through the buckle until it reaches the stopper section before use.

Thin tires

Thick tires



## Taking Down the Bicycle

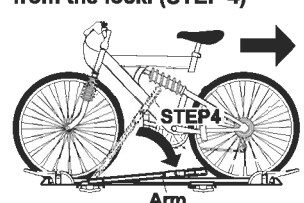
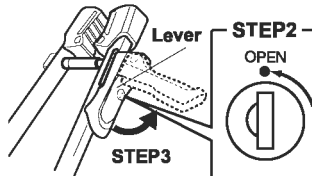
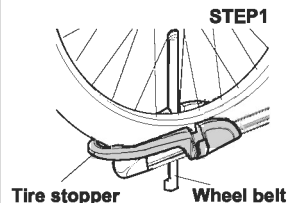
### 1 Taking Down the Bicycle

Always put the bicycle on, and take the bicycle off the lock when the vehicle is on a flat surface.

1 Remove the wheel belts from the front and rear tire stoppers. (STEP 1)

2 Release the lever lock (OPEN) (STEP 2) and pull the lever out. (STEP 3)

3 Slide the bicycle to the rear, push the arm down, hold the bicycle firmly, and lift it down from the lock. (STEP 4)

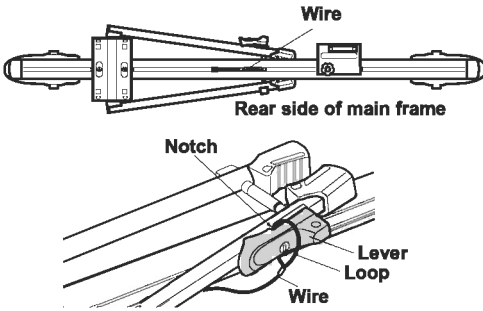


# Attaching a Bicycle

## 1 Using the Wire Lock



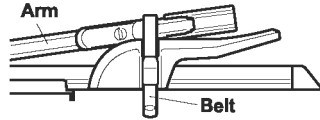
Do not remove the lock cover when the wire lock is in place.



- 1 Pull the lever out, pass the wire loop through to the lever notch, push the lever down, and lock the key.



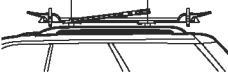
If you are concerned about looseness of the arm, fix the arm in place using a tire stopper belt.



## Cautions

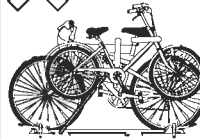


Less than 50cm or more than 85cm

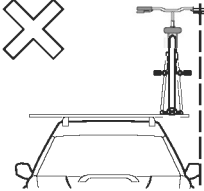


Always install so that the front and rear spaces of the carrier are within the 50cm-85cm range.

If the attachment is installed when the front and rear spaces of the carrier are outside the correct range, unnecessary force is placed on the attachment that may cause the attachment to fail, which may lead to a serious accident involving nearby vehicles or pedestrians.

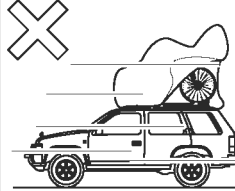


Do not attach anything other than a bicycle, and do not attach more than 2 bicycles to one attachment. Attaching objects other than bicycles, or attaching bicycles that do not match the described conditions may cause the object, bicycle or attachment to fall, which may lead to a serious accident involving nearby pedestrians or vehicles.



Install the attachment so that the bicycle handlebars do not protrude from the side of the vehicle.

If a bicycle is attached with the handlebars protruding from the side of the vehicle, the bicycle may collide with other objects while the vehicle is in motion, causing the bicycle to fall, which may lead to a serious accident involving nearby pedestrians or vehicles.



Do not use bicycle storage cases or waterproof sheets when your bicycles are attached to the lock. If you use such bicycle storage cases or waterproof sheets, the increased air pressure when driving may cause the bicycle or attachment to fall, which may lead to a serious accident involving nearby pedestrians or vehicles.

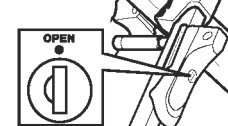


When driving with your bicycle attached, always remember to take into account the additional height of your vehicle, and do not enter low-roof car parks or tunnels with a low clearance.

If you enter a low-roofed car park or tunnel when a bicycle is attached to the lock, the bicycle will hit the height limit bar or tunnel wall causing the bicycle or attachment to fall, which may lead to a serious accident involving nearby pedestrians or vehicles.



Never exceed the speed limit, and reduce your speed further if there are strong winds or if the road conditions are bad. Driving continuously at high speeds above the speed limit, driving continuously in high winds, or driving on bad roads will cause the knob nut or bolts to loosen causing the bicycle or attachment to fall, which may lead to a serious accident involving nearby pedestrians or vehicles.



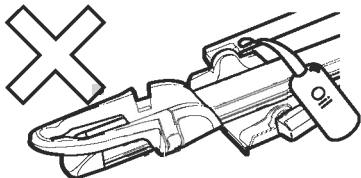
Always lock with the key before driving.

If you do not lock the key, external forces (wind etc) may cause the lock cover to break off and fall, which may lead to a serious accident involving nearby pedestrians or vehicles.



Remove the attachment and carrier before using a car wash. If you do use a car wash with the attachment or carrier attached by mistake, always check the attachment condition of the attachment and carrier afterwards. Using a car wash with the attachment or carrier attached may cause damage to the attachment, carrier, and vehicle.

## Daily Maintenance



- 1 Wash off dirt and mud with water.
- 2 Wipe off dirt with a well wrung-out wet towel.
- 3 Allow it to dry in the shade.

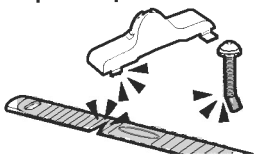
### Caution

Do not use solvents such as thinner etc.  
Do not lubricate screws or bolts.

## Storing the Lock

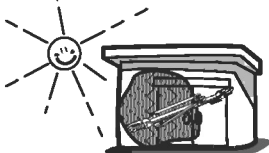
### Inspecting the Parts

- 1 Clean the lock, and inspect each of the parts for abnormalities. If you discover any bent or damaged parts, discontinue use immediately and replace the parts.



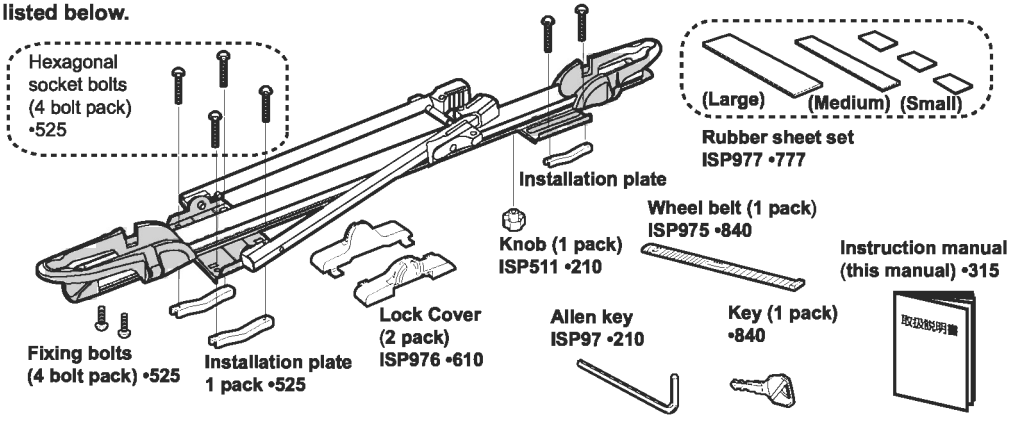
### Store the lock

- 1 Store in a dry place indoors, out of direct sunlight.



## Spare Part Information

The following genuine spare parts are available for this lock. If you require spare parts, take the part<sup>1</sup> to the dealer where you bought the carrier, or order the necessary part using the part name listed below.



### Notes

The specifications or external appearance of this product or any of the genuine spare parts may be changed for improvement without prior notification.

## Contact Information

If you have any complaints, requests or comments, please contact us at the service center listed below. Car Mate USA shall not be held liable for any accidents or incidental losses arising from improper installation or use, nor for those arising from installation or use after the customer has made any modifications to the system's original configuration or specifications.



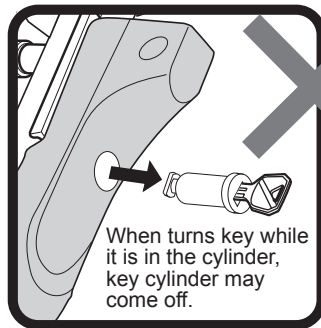
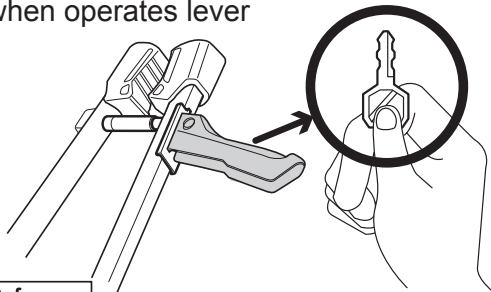
Car Mate USA 383 Van Ness Ave., Suite 1603 Torrance, CA  
310.533.9881  
www.innoracks.com support@rv-inno.com



# INA382 Additional manual

## CAUTION

Key must be out from key cylinder when operates lever



### Reference

- When pushes the lever down while the key is in lock position and turns the key with tension, the key cylinder may come off the the lever.
- When operates the lever while the key is in the cylinder, the key may turn to lock position with the weight of key chains and/or the lever may cause damage due to a bitten the key chain.